



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**



Environmental Management Cleanup Forum

Fiscal Year 2024: A Year In Review

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Legacy Cleanup Overview



PROTECT
WATER QUALITY

Groundwater monitoring & remediation
Surface water management
Surface/storm water sampling controls



CLEAN UP
THE LAND

Surface & subsurface investigation & remediation
Material Disposal Areas (MDAs) remediation
Disposition of remediation waste



SHIP WASTE
OFF-SITE

Above-ground transuranic (TRU) waste
Below-ground TRU waste
Low-level waste (LLW) & mixed LLW





Mission Excellence: The Foundation for Cleanup

Communications
integrates these
elements

**Disciplined
Operations**

**Safety &
Training**

**Best
Practices**

**Regulatory
Compliance**





Success: Met all 15 FY24 Consent Order Milestones agreed to with the New Mexico Environment Department

Milestones met include in part:

- ✓ Completed drilling hexavalent chromium well R-76 and taking initial samples
- ✓ Developed drilling work plans for five additional hexavalent chromium wells
- ✓ Conducted Aggregate Areas field work and risk assessments
- ✓ Collected vapor borehole samples at Material Disposal Area (MDA) A
- ✓ Resumed soil vapor extraction at MDA L





Protect Water Quality: FY24 Snapshot

Restarted partial operations of the hexavalent chromium interim measures treatment system

Managed the extensive network of storm water control systems, including conducting more than 5,000 inspections

Operated the surface water and groundwater monitoring program, collecting 5,300 samples

Ensured monitoring and protection of water supplies





Protect Water Quality: Groundwater Monitoring

“Interim Facility-Wide Groundwater Monitoring Plan” Annual Consent Order Milestone

- ✓ Monitor seven major watersheds across LANL
- ✓ Includes base-flow, alluvial, perched intermediate, and regional groundwater
- ✓ Critical component of water protection strategy

Supports ongoing operations

Enhances the understanding of groundwater within and beneath LANL through sampling

Assists in corrective measures evaluation, development and implementation





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Clean Up the Land: Middle DP Road Site



- ✓ Completed final waste shipment
- ✓ Secured regulatory approval from NMED in February 2024

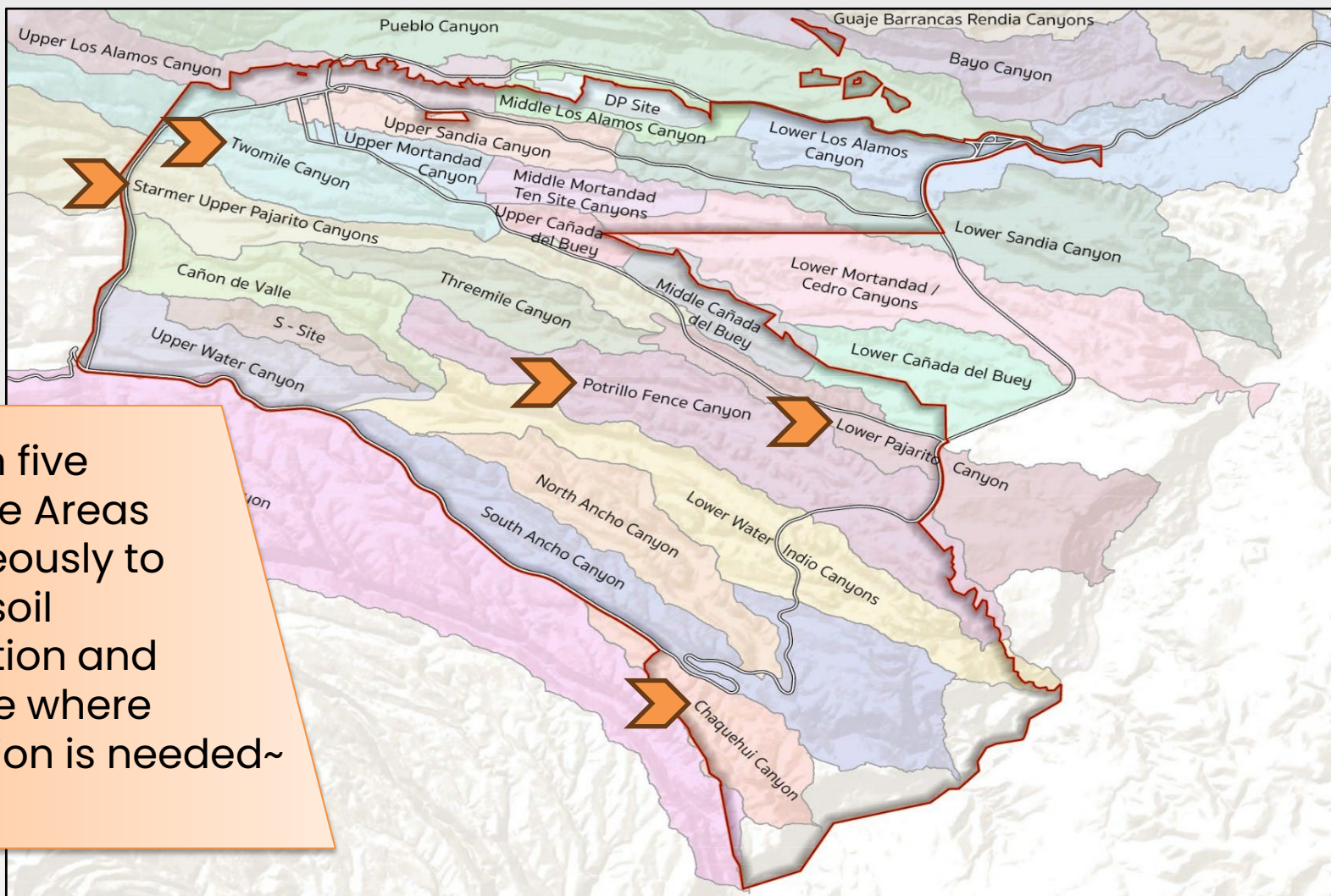
Project supports Los Alamos County economic development



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Clean Up the Land: Recent Aggregate Areas Work



Worked in five
Aggregate Areas
simultaneously to
conduct soil
investigation and
determine where
remediation is needed~
see ➤





Clean Up the Land: Recent MDAs Work

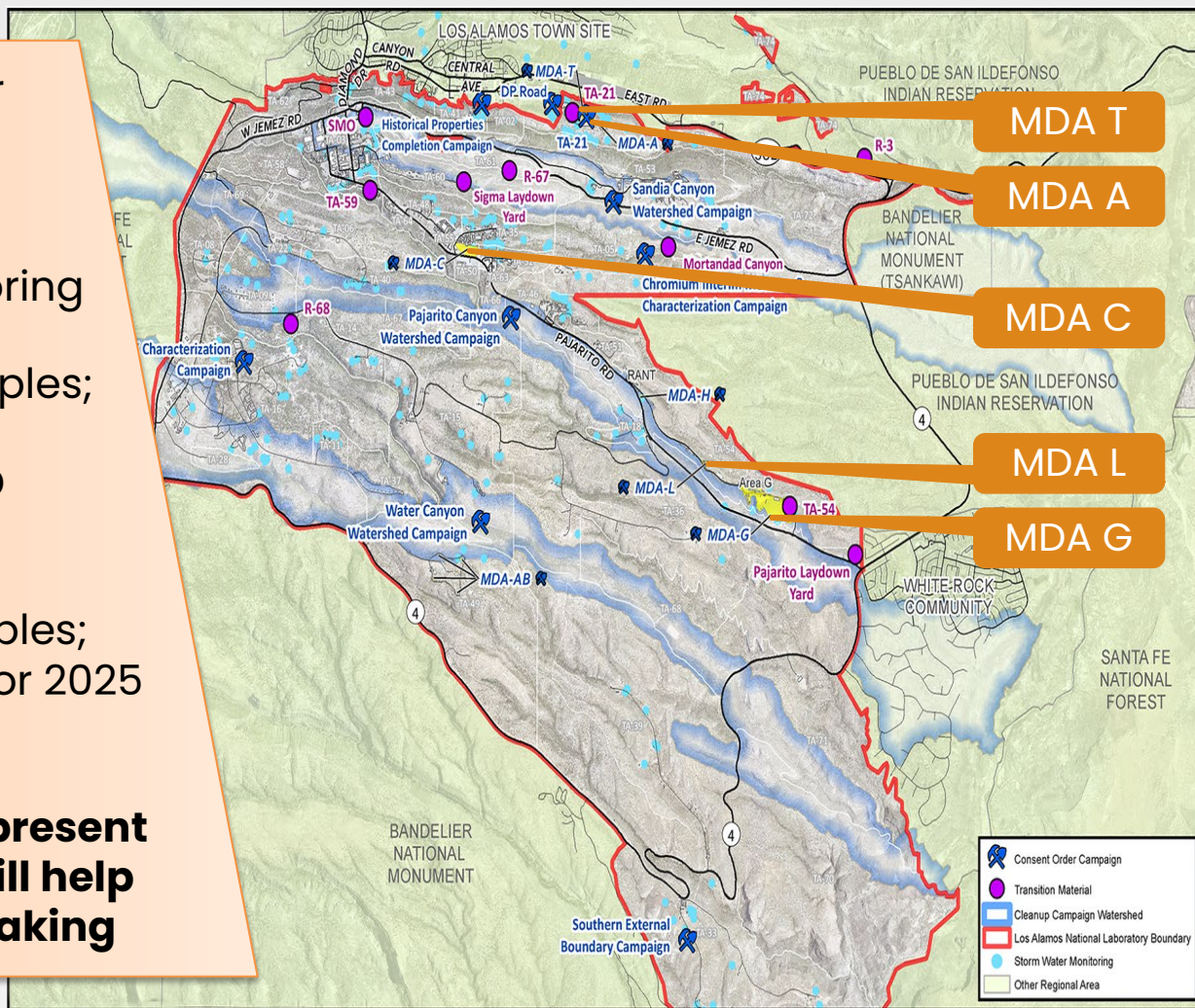
MDAs C & G: Collected vapor samples

MDA L: Operated soil vapor extraction and vapor monitoring

MDA A: Collected vapor samples; prepared and submitted an Investigation Report to NMED (includes risk assessment)

MDA T: Collected vapor samples; Investigation Report slated for 2025 (includes risk assessment)

Vapor sampling shows no present risk to public health and will help inform future decision-making





Ship Waste Off-Site: FY24 Snapshot

Completed 22 transuranic (TRU) waste shipments to WIPP

Shipped 70.88 cubic meters (m³) of TRU waste to WIPP

Shipped 1,358.77 m³ low level wastes (LLW) & mixed LLW

Restarted drill & drain operations for TRU waste drums

Demonstrated effectiveness of new waste characterization technology





Corrugated Metal Pipes (CMPs) Retrievals



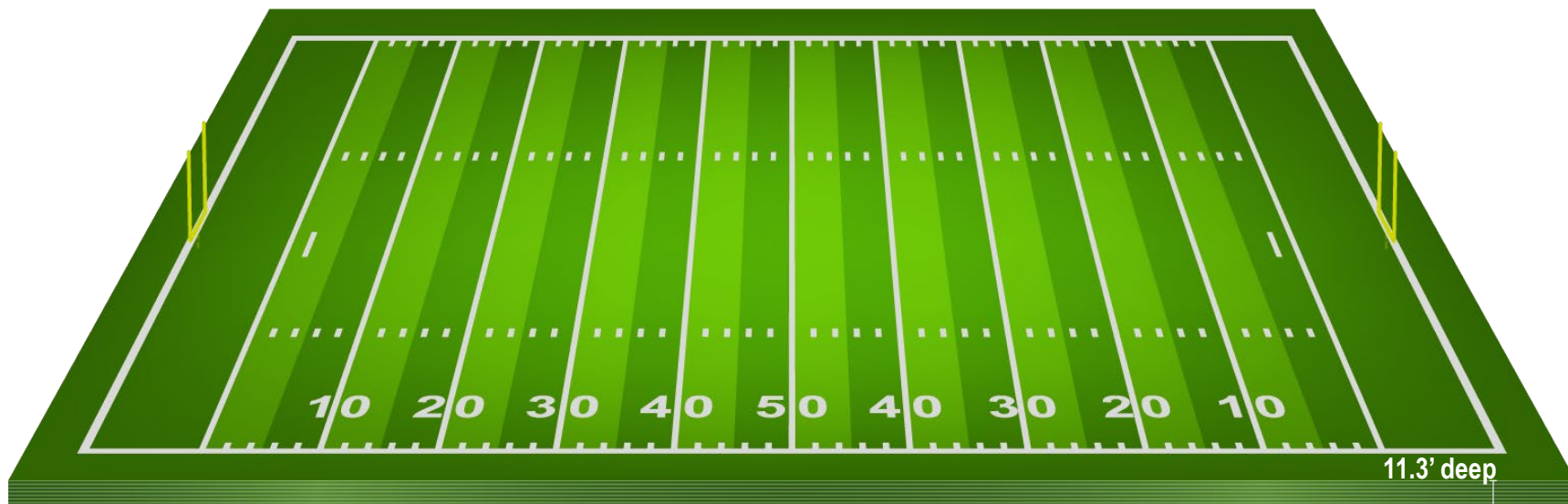
Final CMPs retrieval





Total Waste Shipments Summary

Waste Shipped Off-Site From Contract Start (4/30/18) to 9/30/24* = 18,434 cubic meters (m³)



TRU = 597 m³

Low Level/Mixed = 13,525 m³

Hazardous = 277 m³

Other Wastes = 4,035 m³

**Filling up 1 football field 11.3 feet deep
(bottom of goalposts are 10' high)**



88,570 55-gallon drum equivalents

*Does not include water shipped





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